
2. Books

Program Name: Books.java

Input File: books.dat

Sam is a studious student who wants to buy all the textbooks for all of his classes in one trip to the bookstore. He just has one problem. He can only carry a maximum weight K on a given trip. Given N books and their weights, help Sam figure out the maximum number of books N he can bring back home on his first trip to the bookstore.

Input

The first integer C denotes the number of test cases to follow. For the following C test cases, each case starts with a floating point number K that represents the maximum weight that Sam can carry on one trip and an integer N that is the number of books that are on Sam's list of books to buy ($0 < N < 50$). The next N floating point numbers represents each book's weight.

Output

Print out the maximum number of books that Sam can bring back home on his first trip.

Example Input File

```
3
26.5 5
3.72
6.83
12.684
6.712
9.152
105.293 5
12.34
53.91
6.29
19.6
13.153
85.73 12
22.35
12.43
7.64
10.75
26.587
13.276
18.2
19.325
8.64
17.272
11.933
22.89
```

Example Output to Screen

```
4
5
7
```